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(54) **SUBMARINE PERISCOPE EYE BOX CONNECTOR, MAST CONNECTOR, AND CONNECTOR GUIDE FOR FACILITATING BLIND INTERCONNECTION**

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439/377, 701, 680

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,905,938 * 3/1990 Braccio et al. 439/374
5,697,805 * 12/1997 Orstad et al. 439/374

5,921,802 * 7/1999 Reiswig et al. 439/374

FOREIGN PATENT DOCUMENTS

88 03715 * 5/1988 (WO) 439/374

* cited by examiner

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(57) **ABSTRACT**

In combination, a male, multiple connection-type, electrical connector, a female, multiple connection-type, electrical connector, and a connector guide for facilitating blind interconnection of the male and female connectors. The male electrical connector comprises a submarine periscope eye box mating end electrical connector. The female electrical connector comprises a submarine periscope mast mating end electrical connector. The connector guide comprises a wall adapted to slidably engage outside surfaces of the female connector, and an outwardly flared skirt extending from an edge of the guide wall opposed to the eye box mating end. The connector guide is slidable onto the female connector and the male connector is slidable into the connector guide and is guided therein by the connector guide skirt, and is guided by the connector guide into the female connector, such that the eye box connector elements engage the mast connector elements.

4 Claims, 4 Drawing Sheets

